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## AMENDMENTS TO THE CLAIMS

1. (Original) A method of producing a microstructured optical fiber from a perform, said method including the steps of:

creating zones of relatively high refractive index at predetermined locations in said perform, said zones substantially surrounded by material of relatively low refractive index to create an array of light guiding cores, and

subsequently drawing said perform to create a length of said microstructured optical fiber.

- 2. (Original) The method as claimed in claim 1 wherein said light guiding cores are surrounded substantially by air.
- 3. (Currently Amended) The method as claimed in claim 1 or 2 wherein said light guiding cores have a generally non-circular cross-sectional shape
- 4. (Currently Amended) The method as claimed in any one of claims 1-3 claim 1 wherein said perform is formed from optically suitable polymeric material.
- 5. (Currently Amended) The method as claimed in any one of claims 1-3 claim 1 wherein a plurality of holes is drilled into said perform at said predetermined locations.
- 6. (Currently Amended) The method as claimed in any one of claims 1-5 claim 1 wherein said perform is drawn to form said microstructured optical fiber in a two-stage drawing process.

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7. (Original) A method of producing a microstructured optical fiber from a perform, said method including the steps of:

creating channels of relatively low refractive index at predetermined locations in said perform, said channels acting to define light guiding cores, and

subsequently drawing said perform to create a length of said microstructed optical fiber.

- 8. (Original) The method as claimed in claim 7 wherein a plurality of holes is drilled into said perform at said predetermined locations to create said channels.
- 9 (Currently Amended) The method as claimed in claim 7 or 8 wherein said perform is drawn to form said microstructured optical fiber in a two-stage drawing process.
- 10. (Currently Amended) The method as claimed in any one of claims 7-9 claim 7 wherein said perform is monolithic